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TITLE: ELECTRONIC SCANNING ANTENNA
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INVENTOR-INFORMATION:

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APPL-NO: JP01303408**APPL-DATE:** November 24, 1989**INT-CL (IPC):** H01Q003/38 , H01Q025/02**ABSTRACT:**

PURPOSE: To attain high accuracy of beam directivity characteristic with high accuracy while keeping comparatively small scale constitution by employing the beam control algorithm combining coarse beam setting by a digital phase shifter and accurate beam setting by an analog phase shifter.

CONSTITUTION: The beam setting into space is classified into the primary beam scanning (coarse scanning) by using the control of a digital phase shifter 2 connecting to all element antennas 1 and the secondary beam scanning (fine setting) by using the control of analog phase shifter groups 9a, 9b connecting to part of element antennas using a beam direction angle set thereby as a base point. It is utilized that the minimum beam scanning interval is proportional to the detail in the setting of the feeding phase and the feeding phase for only part of elements is minutely changed by the analog phase shifter. Thus, the accurate beam control is attained with comparatively inexpensive equipment constitution.

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